

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2004-311415

(43)Date of publication of application : 04.11.2004

(51)Int.Cl.

H05B 33/14  
C09K 11/06

(21)Application number : 2004-049242

(71)Applicant : KONICA MINOLTA HOLDINGS INC

(22)Date of filing : 25.02.2004

(72)Inventor : FUKUDA MITSUHIRO  
SUZURISATO YOSHIYUKI  
KITA HIROSHI

(30)Priority

Priority number : 2003079516 Priority date : 24.03.2003 Priority country : JP

## (54) ORGANIC ELECTROLUMINESCENT ELEMENT, DISPLAY DEVICE, AND LIGHTING DEVICE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an organic electroluminescent element which has high emission luminous intensity and excellent quantum efficiency, and in particular has high durability, and to provide a display device and a lighting device each having the same.

**SOLUTION:** This organic electroluminescent material contains a substituted carbazole compound in an organic layer, and the content of a compound in which an amino group is bonded to a structure bonding to a carbazole ring existing in the layer as an impurity is less than 0.5 weight %.

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C) 1998,2003 Japan Patent Office